

## School Performance and the Proposed Strategic Plan: The Case of a Laboratory School

Gerry S. Digo<sup>1</sup>

1-Sorsogon State University, Sorsogon City, Philippines

### ABSTRACT

This study determined the laboratory school's performance and developed a three-year strategic plan to enhance its organizational performance. The researcher used a descriptive survey design, and the survey results were analyzed using frequency count and mean. The participants consisted of the school management, alumni, faculty, non-teaching staff, and students. Purposive sampling was used to select 101 participants within a school year for the study. The analysis and synthesis of data showed that the areas that needed attention were reducing the number of students per class, formulating faculty development programs, conducting in-service training, and hiring competent teachers. Further, developing the laboratory school's purpose, values statement, objectives, key improvement strategies conducting operational research, publication of research studies, funding for faculty research, providing incentives for researchers, and preparing the vision-mission for the laboratory school are recommended in this study. These findings are addressed in the strategic plan developed for review and approval of the management committee to achieve organizational effectiveness and raise the performance of the laboratory school. Finally, this study may ensure the continued operation of the laboratory schools in state universities and colleges.



Copyright © 2021 The Authors

### OPEN ACCESS

Corresponding Author:

Gerry S. Digo

Email: [gsdigo557@gmail.com](mailto:gsdigo557@gmail.com)

Pages: 94-105

**Keywords:** *laboratory school, school performance, strategic plan*

**JEL Classification:** *I2, I20, L25*

**How to cite this article (APA):** Digo, G. S. (2021). School Performance and the Proposed Strategic Plan: The Case of a Laboratory School. *JISR management and social sciences & economics*, 19(2), 94-105.  
<https://doi.org/10.31384/jisrmsse/2021.19.2.7>

## INTRODUCTION

The management of laboratory schools is a highly complex task. It involves values, vision, mission, organizational structure, community participation, political influences, and individual perceptions on corporate objectives that are sometimes in conflict with stakeholders. In a way, decision-making within public schools goes beyond management. (Pearson & Albon, 2013; Walker et al., 2013). Because of this, the formulation of a strategic plan is critical to be able to focus on the delivery of excellent educational performance as in the case of a state college, which was created through Republic Act No. 7666 on December 30, 1993, and was renamed into a university through Republic Act No. 11088 on October 17, 2018. The university is mandated to provide advanced and higher professional, technical, and special instructions in educational technology, engineering and architecture, public administration and management, accountancy, economics and finance, agriculture, forestry and fisheries, arts and sciences, maritime education, peace and security courses and other related fields of study. It shall also undertake research and extension as well as income generation programs. The charter also states that the university may operate a reasonably-sized laboratory high school under the control of the College of Education. This laboratory school is located within the main campus and is used by the Teacher Education Program. It caters to secondary and elementary teacher education students. The laboratory school complements the goal of the Teacher Education Program to provide training and development of primary education teachers in an authentic learning environment.

Given that normative funding is implemented for state universities and colleges (SUCs), the laboratory school experienced funding problems in its operation (Mangaba, 2017). To mitigate the lack of funding, it complied by gradually cutting down admissions of new students to below 500. Furthermore, the Board of Trustees (BOT) authorized the collection of physical development funds, library fees, guidance fees, laboratory fees, athletic fees, medical/dental fees, and insurance fees. Due to funding constraints, the future of the laboratory school is at stake. The Teacher Education program faced the challenge of maintaining a laboratory school for 500 students and becoming a proper laboratory school for the Bachelor in Elementary Education (BEEd) and Bachelor in Secondary Education (BSEd) programs.

Furthermore, the Medium-Term Development Plan (2008 – 2012) and succeeding plans of the university had no long-term strategic plan for the laboratory school. Therefore, it was necessary, as mandated by the Governance of Basic Education Act of 2001, that it should respond positively by evaluating its performance to develop a strategic plan for stability, efficiency, and effectiveness and support local school development (Hanberger et al., 2016). Integrating external stakeholders, school management, faculty and staff, student leaders, curriculum, facilities, vision and mission, and social factors into school strategic planning leads to a new perspective of the school planning process. The rationale behind school participatory planning is because stakeholders are more involved with the changes in the school, they can, with great immediacy and accuracy, assist the planning process with information and judgments from the local communities where the students come from (Latorre-Medina & Blanco-Encomienda, 2013; van Wyk & Moeng, 2014).

The external and internal stakeholders primarily assessed the performance of the laboratory school as inputs for the improvement of the school. The development of the proposed strategic plan was prompted by the results of the survey conducted to determine the performance of the laboratory school. The building blocks considered for the organizational effectiveness were along with the following common areas of the operation of the laboratory school: vision, mission, values statements, goals, and objectives; support to students; library; physical plant facilities; laboratories; and administration. And the following program areas: faculty; curriculum and instruction; support to students; library; research; extension and community involvement. Given all these, the proposed strategic development plan for the laboratory school was developed to

improve the performance of the laboratory school.

## LITERATURE REVIEW

Strategic management is a valuable tool to improve the performance of the laboratory schools of state colleges and universities. [Parakhina et al. \(2017\)](#) demonstrated that universities have a role in using strategic management for the global competitiveness of the national higher education system. Likewise, [Austin \(2020\)](#) concluded that national policies on secondary education could be achieved through strategic planning and management. Finally, [Usoh et al. \(2018\)](#) proposed that a new strategic planning model should be designed along with the mandate and vision of the institution. Taken in the same context, laboratory high schools in the Philippines managed by a college or university can use the expertise of the faculty in the higher education institution to run a strategic planning activity in laboratory schools. The output in the form of a proposed strategic plan may then be utilized to improve the overall performance of secondary schools.

The phrase strategic planning often can elicit mixed reactions in public schools. For some individuals, strategic planning in public education could distract from the real work of teaching and research ([Green, 2010](#)). Meanwhile, the literature on strategic planning places this activity as crucial for illuminating future directions, central to making articulate decisions, essential for setting priorities, and helpful in refining institutional performance ([Munawaroh & Dyah, 2019](#); [Shah, 2013](#)).

The usefulness of strategic planning for laboratory schools is well-established for school improvement. [Caputo and Rastelli \(2014\)](#) established the association of better school improvements with the ability to analyze the context, prioritize elements in the diagnostic phase and detect specific improvement goals. Furthermore, [Jaya \(2020\)](#) describes the utility of self-evaluation in strategic management as a basis for formulating the school's vision, mission, goals, and professional development plan. [Pratikno et al. \(2021\)](#) emphasized the role-played by the laboratory school principal in developing strategies to help improve the quality of education. Likewise, [Sahin \(2013\)](#) identified that the principal used the following strategies for school improvement: improving co-operation and communication, teacher development, meeting the need of the personnel, improving the physical conditions, and increasing the provision of educational technologies and increasing their use.

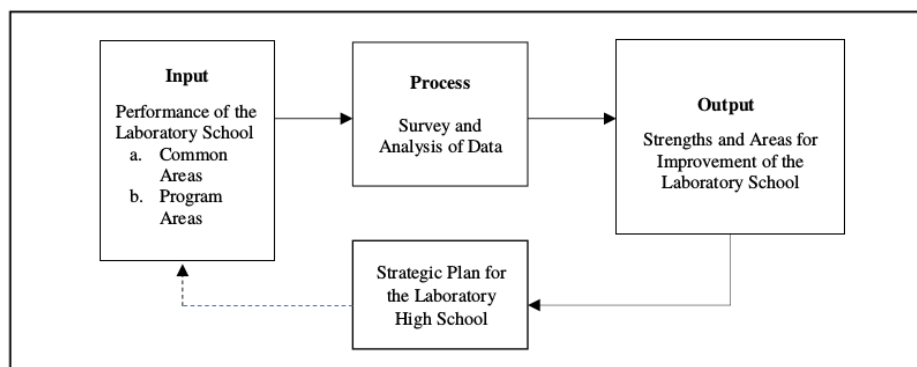
Several researchers have reported on the topic of strategic planning and school performance. In the prior studies ([Chukwumah & Ezeugbor, 2015](#); [Toorani, 2012](#)), the researchers highlight that strategic planning in school is a process and requires management to exert effort to ensure a comprehensive school daily performance. [Yureva et al. \(2016\)](#) stress that school leaders' strategic planning helps school leaders act proactively in the future. The researcher reiterates that education improvement strategies need to prioritize effective teaching practices and the overall performance of students. On the other hand, some researchers have doubted the effectiveness of strategic planning; nonetheless, the context is not yet developed. [Widodo \(2018\)](#) stresses that not all schools achieve peak performance due to strategic planning. Despite the conflicting views, [Amoli and Aghashahi \(2016\)](#) posit that strategic planning is crucial to creating an educational institution's future. This means that the future must be well-defined through partnership and collaboration with stakeholders. In this partnership, learning systems are designed, and policies are made.

However, there are also challenges in laboratory schools' educational planning and management. [Sahin \(2013\)](#) listed the following: lack of financial allocations and financial sources. Likewise, [Jacob and Ndubuisi \(2020\)](#) identified the following challenges: inadequate funding, poor planning, poor relationship between planners and implementers, weak administrators, inadequate infrastructural facilities, lack of political will, institutional corruption, inadequate personnel, and insecurity. They also suggested the following strategies to address the challenges: adequate fund-

ing, sound planning, positive relationship between planners and implementers, the appointment of qualified administrators, provision of good infrastructural facilities, development of positive political will, fight institutional corruption in the education sector, ensure the security of schools and employment of more professional teachers. Hussain and Isran (2017) recommended deploying nonlinear, resource-based, process-based, or adaptive strategies with the consolidation of meritocracy in leadership positions of the university to address the following factors that affect the standards of education: governance, political will, service culture, faculty hiring system, job market, and faculty and students' slack performance affect the standards of education.

## CONCEPTUAL FRAMEWORK

The strategic plan for the laboratory school of a state university was developed to improve its performance along with the findings from the analysis of the survey data, which described the strengths and areas for improvement along with the general and program areas. The input, process, output, and the proposed intervention to improve the performance of the laboratory school were drawn into the conceptual framework in Figure 1, which provided the focus and direction of the study.



**Figure 1:** *Conceptual Framework*

## OBJECTIVES OF THE STUDY

This study was surveyed to determine the school's performance and develop a strategic plan for the laboratory school. Specifically, this study sought answers to the following: [1] What is the performance/status of the laboratory school along with the following areas: (a) vision, mission, values statements, goals, and objectives; (b) faculty; (c) curriculum and instruction; (d) support to students; (e) library; (f) research; (g) extension and community involvement; (h) physical plant facilities; (i) laboratories; and (j) administration? And, [2], what strategic plan can be developed for better performance?

## METHODOLOGY

This study used the descriptive survey method (Creswell, 2014). Descriptive survey research uses a survey to collect data about respondents. Data were gathered utilizing the survey questionnaire patterned after the Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACUP) Master Survey Instrument for Accreditation of Programs was used. Some of

the standards were adopted from the National Competency-Based Teacher Standards-Teacher's Strengths and Training Needs Assessment (NCBTS-TSNA) Primer & Toolkit Handbook and the Manual on Assessment School-Based Management Practices. Three experts then validated the questionnaire. Items were rated using Likert-scale point 5 (Polit & Beck, 2012).

A total of 101 participants were purposively selected from internal and external stakeholders of the laboratory high school. Data gathering was conducted through a school survey. The study began with seeking formal permission to conduct the research, then administration of the survey questionnaires. Data were analyzed using frequency count and the weighted mean. The survey data were interpreted according to these descriptions: 4.51 – 5.00: Excellent performance; 3.51 – 4.50: Very Good performance; 2.51 – 3.50: Good performance; 1.51 – 2.50: Fair performance; 1.00 – 1.50: Poor performance.

## RESULTS AND DISCUSSION

Table 1 provides the overall summary of the results of the study. The overall weighted mean was 3.58, indicating a performance of very good. However, areas such as research, library, physical plant and facilities, and laboratories had a good performance, with means of 3.47, 3.36, 3.28, and 3.28, respectively. This implies that these particular areas need more attention in terms of improvement. To meet the standards of accrediting organizations, the university needs to raise the overall performance to excellence through pragmatic strategic planning and commitment to the vision. Akyel et al. (2012) affirm that excellence should be the target of universities and colleges, as in most instances, outstanding is hard to reach in accreditation. The university must commit to developing and implementing a workable strategic plan to attain excellence, and this process unifies the university towards achieving a common goal.

**Table 1.**  
Summary of Survey Results

Area	Indicators	Mean	Interpretation
Area 1	Vision, Mission, Goals, and Objectives	3.63	Very Good
Area 2	Faculty	3.74	Very Good
Area 3	Curriculum and Instruction	3.67	Very Good
Area 4	Support to Students	3.92	Very Good
Area 5	Research	3.47	Good
Area 6	Extension and Community Involvement	3.57	Very Good
Area 7	Library	3.36	Good
Area 8	Physical Plant and Facilities	3.28	Good
Area 9	Laboratories	3.28	Good
Area 10	Administration	3.60	Very Good
Mean		3.58	Very Good

## Common and General Areas

Areas 1, 4, 7, 8, 9 & 10 are common and general because the university officials run the governance, management, and operations system and considered shared facilities with the laboratory high school. [Saracho \(2019\)](#) pointed out that this connection would allow the laboratory school to benefit from university resources and best practices.

*Area 1. Vision, Mission, Values Statements, Goals, and Objectives .* The survey results for Area 1 are shown in Table 2 below. The overall mean was 3.63, indicating that the university performance is “very good.” However, the ultimate goal is to achieve excellence. The document analysis on Area 1 revealed that the university Code and Students Handbook contains the written vision, mission, goals, and objectives. The Teacher Education Program also had a written vision, mission, goals, and objectives per Board of Trustees Resolution No. 49, series 2008. However, the laboratory school did not have a written vision, mission, goals, and objectives of its own. This could partly explain why the stakeholder’s awareness of the laboratory school’s vision, mission, values statement, goals, and objectives was “good”; there were also no written values statements. This led to the formulation of the values statement and objectives of the secondary program. [Machado and Taylor \(2010\)](#) strongly suggest consultation and participation with main stakeholders as an essential part of the strategic planning exercise. A significant commitment to bottom-up rather than top-down processes and active involvement of all education partners is crucial in the strategic planning process.

*Area 4. Student Support and Services.* The results of the survey for Area 4 are shown in Table 2. The overall mean score was 3.92, signifying a “very good” status. It could be inferred that the students were pleased with the university’s support system. However, it is suggested that the awards method for students be revisited despite the rating. For example, the current policies on selecting honour students are based on DepEd orders or memoranda. These policies should be reviewed, amended, and institutionalized along with the university’s admission policies, which is the best predictor of students’ performance, according to [Balasico and Tan \(2020\)](#). It was also revealed that the laboratory school curriculum meets the minimum standard set by the Department of Education and the University Academic Council. Amendments or revisions of curricula, including the secondary curriculum, require approval from the University Academic Council and the Board of Trustees (BOT). If the laboratory school adapts the Department of Education’s 2010 Secondary Curriculum and the K to 12 Programs, the process must be strictly adhered to ([Machado & Taylor, 2010](#)).

*Area 7. Library .* The overall status of Area 7 was “good,” with a mean score of 3.36. Other details of the results are provided in Table 2. There is only one library on the main campus of the university. Because of this, there is pressure on library resources. Mini libraries should be created at the department levels, and the existing library should be expanded to accommodate the university’s needs. With qualified school personnel taking charge of the library facilities, the following options are worth considering: exploring and establishing funding linkages to enhance library facilities and resources; reviewing, amending, and improving library policies and procedures to devise more friendly access to collection and services.

*Area 8. Physical Plant and Facilities.* The overall mean rating for Physical Plant and Facilities was “good” at 3.28, as reflected in Table 2 below. The facilities that require immediate funding are the assembly of potable water facilities that are well distributed in the buildings. Likewise, maintenance of the comfort rooms, construction of entrance and exit for differently-abled persons, and the maintenance and repair mechanism are waiting for practical solutions. Laboratories are included in the support systems for any academic program, and these are necessary and essential to successfully implement curricular programs inclusive of their use and functions ([Dyer et al., 2020](#)).



*Area 9. Laboratory* . The availability of resources, among others, affects education quality (Felix et al., 2020). Table 2 portrays the results of the survey for the laboratory area. The results showed that the top priority is a separate science laboratory room fitted with laboratory tables with sink and water, electrical and gas outlets, and standard equipment, apparatus, and chemicals. Equipment, instrument, and materials are also needed in the classrooms. Likewise, a system for inventorying equipment and facilities must be institutionalized for systematic and periodic monitoring. Funding could be sourced in part from the general parents and teachers' association. That is, collecting a laboratory fee per student whose parents are members of the association (Walker et al., 2013).

*Area 10. Administration*. The results of the survey for this area are shown in Table 2. The concern was with the institution's general affairs and organizational performance in administration. Thus, the administration should adopt institutional processes and ensure that the methods are satisfactorily implemented. Business functions of the school should be maintained and managed by qualified and competent personnel to promote fiscal integrity, economy, responsibility, and accountability. Likewise, the performance of the business services and sound financial management are indicators of a healthy financial administration (Akyel et al., 2012). The administrative personnel should be qualified to perform various administrative services. Furthermore, the efficiency of administrative setup and relationship among the personnel should be considered significant criteria for excellence (Network, 2016).

One primary option is to review and amend or revise the Constitution and By-Laws of the parents and teacher association to enhance engagement and effectiveness in budget preparation, procurement, sourcing of funds, and school governance. Since the university provides the MOOE, transparency on the available funds for the laboratory school will take care of the issue. With stakeholders' participation, the Area Chairman was innovative in institutionalizing the continuous school improvement process. Efforts must be executed to ensure that these innovations positively transform the laboratory school. Otherwise, the threat of downsizing or total closure of the laboratory school will be an issue (Fernandez, 2011; Ralph, 2010).

**Table 2.**

Common and General Areas

Area	Indicators	Mean	Interpretation
Area 1	Vision, Mission, Goals, and Objectives	3.63	Very Good
Area 4	Support to Students	3.92	Very Good
Area 7	Library	3.36	Good
Area 8	Physical Plant and Facilities	3.28	Good
Area 9	Laboratories	3.28	Good
Area 10	Administration	3.60	Very Good
Mean		3.51	Very good

### Program Areas

Areas 2, 3, 5 & 6 are directly governed and managed by the laboratory school under the university's direct supervision of the University of Education. These four areas primarily provide the department's expected course and program outcomes annually.

*Area 2. Faculty.* The quality of educators, among others, affects the quality of education (Felix et al., 2020). Table 3 below provides the detail of the survey results for Area 2. The overall mean for Area 2 was 3.74, indicating a “very good” performance. The directive of CHED is to maintain a population of not more than 500 students at the laboratory school.

Nonetheless, this was not the case. More students were admitted exceeding the limit, resulting in a teacher-student ratio of 1:56. Relative to this, the policies on recruitment, admission, retention, and graduation were not reviewed, so there were no clear policies that could be implemented and respected by all stakeholders. Furthermore, a high teacher turnover rate is one of the weaknesses of the laboratory school (Erickson et al., 2012). Hence, the policies on the recruitment, selection, and hiring of faculty should be revisited. Finally, there is the need to sustain and raise the indicators which were “very good,” such as faculty members acting as role models by showing respect for colleagues and their ideas, implementing school policies, being careful with the effects of faculty behaviour on the students. Faculty members showed responsibility, commitment, and loyalty to the institution (Akyel et al., 2012).

*Area 3. Curriculum and Instruction.* Quality of education is primarily defined through the relevance of curriculum and quality of graduates (Felix et al., 2020). Table 3 highlights the detailed results of the survey for area 3. The overall mean score was for Area 3 was 3.67, inferring “very good” as well. This implies that the university has an excellent standing concerning the secondary curriculums. According to Erickson et al. (2012), the strengths of laboratory schools include better preparation for higher education, an understanding of a university atmosphere, higher university acceptance rates, and increased performance on standardized tests. However, the level could be enhanced to excellence. The curriculum should have content and design that enables the students to achieve the intended learning outcomes. It should pursue the institution’s mission and attain the course objectives. The instructional process should provide learning opportunities for students (Latorre-Medina & Blanco-Encomienda, 2013; van Wyk & Moeng, 2014).

*Area 5. Research.* The results of the survey for this area are shown in Table 3. The overall status of the study was “good,” with a mean rating of 3.46. Doing research is an essential requirement for an educational institution. The idea is to have a firmly established research and development program. The institutional leadership in research should be proactive and developmental in orientation (Ralph, 2010). Furthermore, the laboratory school may be considered as a model for creative and innovative learning practices by professional teacher candidates (Endang, 2021); the laboratory school’s faculty members may pursue these through action research to improve operations, teaching content, and procedures that align with the research agenda of the teacher education program and the primary education curriculum. A proper reward system should be put in place to motivate faculty to do research and publish their research outputs. The external motivation to do action research comes in awards and honoraria awarded to researchers. However, faculty members with approved research tend to be loaded. This problem must be resolved, including the research publication whose mean rating was low. This may be attributed to the absence of a journal published by the university and the extent of circulation and distribution of the journals. Therefore, it is recommended that publication policies be prepared to guide the establishment of research journals.

*Area 6. Extension.* The societal impact also affects the perceived quality of higher education (Felix et al., 2020). Hence, the survey results for extension are given in Table 3. Overall, the performance of the laboratory school for extension was “good,” with a mean rating of 3.57. The extension division functions to make an institution’s presence felt in the community. It involves applying existing and new knowledge and technology and those generated in the institution to improve the quality of life of the people in the community (Widodo, 2018). Approved extension projects are required to avail of the funds allocated for extension services. To improve the documentation of



extension activities, completed extension projects can be presented during University Annual In-House Review and published in the Research and Development Journal, President's Annual report, students' publication, or an international journal.

**Table 3.**  
Program Areas

Area	Indicators	Mean	Interpretation
Area 2	Faculty	3.74	Very Good
Area 3	Curriculum and Instruction	3.67	Very Good
Area 5	Research	3.47	Good
Area 6	Extension and Community Involvement	3.57	Very Good
Mean		3.61	Very Good

### THE PROPOSED STRATEGIC PLAN

[Lahtero and Kuusilehto-Awale \(2013\)](#) explained that the realization of strategic leadership in the leadership team's work was the leadership team members. The presence of school leaders in strategic planning and the knowledge of the school's actual performance may lead to a better and more effective planning process. As [Watson and Crossley \(2001\)](#) argued, the strategic management process is a significant vehicle for socio-cultural change to facilitate and enable organizational learning.

Upon the leadership of the school head and the knowledge of the context and performance of the school, the proposed strategic plan was prepared with the primary objective of improving the organizational performance of the laboratory school. The program areas, namely the faculty, curriculum and instruction, research, and extension and community involvement, regardless of the result of the school survey, should always be a priority in the school-wide improvement plan.

The proposed three-year strategic plan, as reflected in, has four main parts. Part one included the proposed vision, mission, and values statement. Part two included the laboratory school purpose and values statement. Parts three and four presented the objectives, key improvement strategies, and annual improvement plans. Given the framework and results of the survey conducted, the objectives and critical improvement strategies were formulated along with the six common areas and four program areas.

Furthermore, the roles of the internal stakeholders, especially that of the parents and teachers' association, should be widely disseminated. Beyond their participation in the governance of the laboratory school, their involvement affects their children's school's engagement and school's performance ([Mo & Singh, 2008](#)). The performance of the laboratory school should also be monitored to improve its internal standing, avoid external threats, and take advantage of external opportunities. Likewise, the laboratory school's purpose, values statement, objectives, key improvement strategies, and annual plans should be incorporated in the university's development plan. Once approved by the Board of Regents, the proposed strategic plan should be published and circulated by the office of the Area Chairman.

## CONCLUSION

The primary objectives of the study were to determine the performance of the laboratory school in the following areas: vision, mission, values statements, goals and objectives, faculty, curriculum and instruction, support to students, library, research, extension and community involvement, physical plant facilities, laboratories, and administration; and to develop a strategic plan to enhance the performance and organizational effectiveness of the laboratory school. Based on the study results, the overall performance of the laboratory school was "very good." The strengths were vision, mission and goals, faculty, support to students, curriculum and instruction, community, community and extension involvement, and administration. However, the areas for improvement are research, physical plant and facilities, library, and laboratory. Hence, a strategic plan was prepared for the laboratory school of a state university.

The study focused only on developing the strategic plan and did not consider its implementation and evaluation. Further studies will look into the performance and outcome of the implemented strategic plan.

## REFERENCES

- Akyel, N., Korkusuzpolat, T., & Arslankay, S. (2012). Strategic planning in institutions of higher education: A case study of Sakarya University. *Procedia - Social and Behavioral Sciences*, 58. [10.1016/j.sbspro.2012.09.979](https://doi.org/10.1016/j.sbspro.2012.09.979)
- Amoli, S. J., & Aghashahi, F. (2016). An investigation on strategic management success factors in an educational complex. *Procedia - Social and Behavioral Sciences*, 230, 447–454. [10.1016/j.sbspro.2016.09.056](https://doi.org/10.1016/j.sbspro.2016.09.056)
- Austin, I. S. (2020). Strategic planning: A remedy for the successful management of Nigeria secondary school system. *International Journal of Secondary Education*, 8(2), 53–68. [10.11648/j.ijssedu.20200802.15](https://doi.org/10.11648/j.ijssedu.20200802.15)
- Balasico, C. L., & Tan, D. A. (2020). Predictors of performance of Central Mindanao University Laboratory High School students. *PEOPLE: International Journal of Social Science*, 6(2), 1–21. [10.20319/pijss.2020.62.0121](https://doi.org/10.20319/pijss.2020.62.0121)
- Caputo, A., & Rastelli, V. (2014). School improvement plans and student achievement: Preliminary evidence from the quality and merit project in Italy. *Improving Schools*. [10.1177/1365480213515800](https://doi.org/10.1177/1365480213515800)
- Chukwumah, F. O., & Ezeugbor, C. O. (2015). Problems of implementation of strategic plans for secondary schools improvement in Anambra State. *Educational Research and Reviews*, 10(10), 1384–1389. [10.5897/ERR2015.2177](https://doi.org/10.5897/ERR2015.2177)
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approach (4th ed.)*. Sage Publications.
- Dyer, J. H., Godfrey, P. C., Jensen, R. J., & Bryce, D. J. (2020). *Strategic Management: Concepts and Cases (3rd ed.)*. Wiley. Wiley.
- Endang, E. (2021). Management of laboratory schools by the state university of the former educational personnel education institute (LPTK/IKIP) (Studies in Legal Perspective). *Sosiohumaniora Journal of Social Science and Humanities*, 23(2). [10.24198/sosiohumaniora.v23i2.30959](https://doi.org/10.24198/sosiohumaniora.v23i2.30959)
- Erickson, P., Gray, N., Wesley, B., & Dunagan, E. (2012). Why parents choose laboratory schools for their children. *NALS Journal*, 2(2). <https://digitalcommons.ric.edu/nals/vol2/iss2/2>
- Felix, S., Baes, I. S. M., Balbuena, A. G., Cañon, D. G., Justiniani, R. P. P., Laoagan, I. J., & Tan, T. A. (2020). Defining quality higher education in an emerging economy: A case of Cebu Philippines. *The Normal Lights*(1), 14–14.
- Fernandez, K. E. (2011). Evaluating school improvement plans and their effect on academic performance. *Educational Policy*, 25(2), 338–367.
- Green, D. A. (2010). Words fail us: How academics view language and ideas in higher education research. *International Journal for Academic Development*, 15(1), 47–59. [10.1080/13601440903529901](https://doi.org/10.1080/13601440903529901)
- Hanberger, A., Carlbaum, S., Hult, A., Lindgren, L., & Lunstrom, U. (2016). School evaluation in Sweden in a

- local perspective: A synthesis. *Education Inquiry*, 7(3), 349–371. [10.3402/edui.v7.30115](https://doi.org/10.3402/edui.v7.30115)
- Hussain, S., & Isran, M. A. (2017). Substantive modeling for stratagems of higher education competitiveness. *Journal of Independent Studies & Research: Management & Social Sciences & Economics*, 15(1).
- Jacob, O. N., & Ndubuisi, A. G. (2020). Educational strategic plans in Nigeria: Challenges of implementation and ways forwards. *International Journal on Integrated Education*, 3(IX), 211–217.
- Jaya, J. (2020). School head strategic management. *International Journal of Southeast Asia*, 1(1), 34–55. [10.47783/journijsa.v1i1.82](https://doi.org/10.47783/journijsa.v1i1.82)
- Lahtero, T. J., & Kuusilehto-Awale, L. (2013). Realization of strategic leadership in leadership teams' work as experienced by the leadership team members of basic education schools. *School Leadership & Management*, 33(5), 457–472. [10.1080/13632434.2013.813464](https://doi.org/10.1080/13632434.2013.813464)
- Latorre-Medina, M. J., & Blanco-Encomienda, F. J. (2013). Strategic management as key to improve the quality of education. *Procedia - Social and Behavioral Sciences*, 81, 270–274. [10.1016/j.sbspro.2013.06.426](https://doi.org/10.1016/j.sbspro.2013.06.426)
- Machado, M. D. L., & Taylor, J. S. (2010). The struggle for strategic planning in European higher education: The case of Portugal. *Research in Higher Education Journal*.
- Mangaba, J. (2017). Normative Funding (NF), and Organizational Performance Indicator Framework (OPIF) for Technological University of the Philippines. *International Journal of Computing Sciences Research*, 1(2), 66–81. [10.25147/ijcsr.2017.001.1.13](https://doi.org/10.25147/ijcsr.2017.001.1.13)
- Mo, Y., & Singh, K. (2008). Parents' relationships and involvement: Effects on students' school engagement and performance. *RMLE Online*, 31(10), 1–11. [10.1080/19404476.2008.11462053](https://doi.org/10.1080/19404476.2008.11462053)
- Munawaroh, M. S., & Dyah, B. (2019). The impact of organizational citizenship behavior and organizational commitment on organizational learning in hotels. *Pertanika Journal of Humanities and Social Science*, 27(2), 1145–1157.
- Network, P. O. D. (2016). *What is educational development?* The Professional and Organizational Development (POD) Network in Higher Education.
- Parakhina, V., Godina, O., Boris, O., & Ushvitsky, L. (2017). Strategic management in universities as a factor of their global competitiveness. *International Journal of Educational Management*, 31(1), 62–75. [10.1108/IJEM-03-2016-0053](https://doi.org/10.1108/IJEM-03-2016-0053)
- Pearson, M. L., & Albon, S. P. (2013). Continuing the discussion on scholarship in pharmacy education. *American Journal of Pharmaceutical Education*, 77(2). [10.5688/ajpe77238](https://doi.org/10.5688/ajpe77238)
- Polit, D. F., & Beck, C. T. (2012). *Nursing research: Generating and assessing evidence for nursing practice (9th ed.)*. Wolters Kluwer Health/Lippincott Williams & Wilkins.
- Pratikno, M., Rasyid, M. R., & Wekke, I. S. (2021). Leadership of the principal on laboratory school of Unimuda Sorong in improving the quality of education. *Proceedings of the International Conference on Industrial Engineering and Operations Management Monterrey*. November 3-5, 2021. IEOM Society International. [10.31219/osf.io/nv52ghttps://osf.io/nv52g](https://doi.org/10.31219/osf.io/nv52ghttps://osf.io/nv52g)
- Ralph, J. (2010). *Strategic planning: Is it worth the effort? The superintendent's perspective*. Johnson & Wales University.
- Sahin, I. (2013). The principals of primary schools' schools' ideas of their school development strategies and practices. *Educational Sciences Theory and Practice*, 13(1), 242–250. <https://eric.ed.gov/?id=EJ1016655>
- Saracho, O. (2019). Contemporary perspectives on research on child development laboratory schools in early childhood education. *Contemporary perspectives in early childhood education*. <https://eric.ed.gov/?id=ED598330>
- Shah, M. (2013). Renewing strategic planning in universities at a time of uncertainty. *Perspectives: Policy and Practice in Higher Education*, 17(1), 24–29. [10.1080/13603108.2012.679753](https://doi.org/10.1080/13603108.2012.679753)
- Toorani, H. (2012). *Introduction to process-based management school*. Tazkieh Publication.
- Usoh, E. J., Ratu, D., Manongko, A., Taroreh, J., & Preston, G. (2018). Strategic planning towards a world class university. *IOP Conf. Series: Materials Science and Engineering*, 306. [10.1088/1757-899X/306/1/012035](https://doi.org/10.1088/1757-899X/306/1/012035)
- van Wyk, C., & Moeng, B. G. (2014). The design and implementation of a strategic plan in primary schools. *International Business & Economics Research Journal (IBER)*, 13(1), 137–144. [10.19030/iber.v13i1.8364](https://doi.org/10.19030/iber.v13i1.8364)
- Walker, W. E., Haasnoot, M., & Kwakkel, J. H. (2013). Adapt or perish: a review of planning approaches for

- adaptation under deep uncertainty. *Sustainability*, 5(3), 955–979. <http://www.mdpi.com/2071-1050/5/3/955/htmlviewitem>
- Watson, G., & Crossley, M. (2001). The strategic management process: an aid to organizational learning in further education? *Research in Post-Compulsory Education*, 6(1), 19–30. [10.1080/13596740100200094](https://doi.org/10.1080/13596740100200094)
- Widodo, U. (2018). Grand theory model of strategy quality: Strategic asset approach at industry. *Academy of Strategic Management Journal*, 17(2), 1–10. <https://www.proquest.com/openview/c628bd769115c8606de805a7f533ad04/1?pqorigsite=gscholar&cbl=3874>
- Yureva, O. Y., Yureva, O. V., & Burganova, L. A. (2016). Strategic management in higher education system: Methodological approaches. *Academy of Strategic Management Journal*(2), 15–15. <http://electronic-businessjournal.com/images/2016/10/1.pdf>